

PTO-1390 (Rev. 07-2005)
Approve for use through 03/31/2007. OMB 0651-0021
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| TRANSMITTAL LETTER TO THE UNITED STATES | ATTORNEY'S DOCKET NUMBER |
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| DESIGNATED/ELECTED OFFICE (DO/EO/US) | BGI-154US2 U.S. APPLICATION NO. (if known, see 37 CFR 1.5) |
| CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 | 10/520220 |
| INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/US2003/021305 3 July 2003 | PRIORITY DATE CLAIMED 3 July 2002 |
| TITLE OF INVENTION | |
| MICROORGANISMS AND PROCESSES FOR ENHANCED PRODUCTIO APPLICANT(S) FOR DO/EO/US | N OF PANTOTHENATE |
| R. Rogers YOCUM et al. | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/ | US) the following items and other information: |
| 1. This is a FIRST submission of items concerning a submission under 35 U. | S.C. 371. |
| 2. X This is a SECOND or SUBSEQUENT submission of items concerning a s | ubmission under 35 U.S.C. 371. |
| This is an express request to begin national examination procedures (35 linclude items (5), (6), (9) and (21) indicated below. | J.S.C. 371(f)). The submission must |
| 4. The US has been elected (Article 31). | |
| 5. A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) | |
| a. is attached hereto (required only if not communicated by the Internatio | nal Bureau). |
| b. has been communicated by the International Bureau. | |
| c. is not required, as the application was filed in the United States Receiv | · í |
| 6. An English language translation of the International Application as filed (35 | 5 U.S.C. 371(c)(2)). |
| a. is attached hereto. | - |
| b. has been previously submitted under 35 U.S.C. 154(d)(4). | · |
| 7. Amendments to the claims of the International Application under PCT Artic | de 19 (35 U.S.C. 371(c)(3)) |
| a. are attached hereto (required only if not communicated by the Internati | ional Bureau). |
| b. have been communicated by the International Bureau. | |
| c. have not been made; however, the time limit for making such amendm | ents has NOT expired. |
| d. have not been made and will not be made. | |
| An English language translation of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendments to the claims under Personal Control of the amendment to the claims under Personal Control of the amendment to the claims under Personal Control of the amendment to the claims under Personal Control of the amendment to the claims under Personal Control of the amendment to the amendment to the control of the amendment to the | CT Article 19 (35 U.S.C. 371(c)(3)). |
| 9. x An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). | |
| An English language translation of the annexes of the International Prelimi Article 36 (35 U.S.C. 371(c)(5)). | nary Examination Report under PCT |
| Items 11 to 20 below concern document(s) or information included: | |
| 11 An Information Disclosure Statement under 37 CFR 1.97 and 1.98. | |
| 12. An assignment document for recording. A separate cover sheet in complia | ance with 37 CFR 3.28 and 3.31 is included. |
| 13. A preliminary amendment. | |
| 14. An Application Data Sheet under 37 CFR 1.76. | |
| 15. A substitute specification. | |
| 16. A power of attorney and/or change of address letter. | |
| 17. A computer-readable form of the sequence listing in accordance with PC | CT Rule 13ter.2 and 37 CFR 1.821 – 1.825. |
| 18. A second copy of the published International Application under 35 U.S.C | C. 154(d)(4). |
| 19. A second copy of the English language translation of the international ap | oplication under 35 U.S.C. 154(d)(4). |
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| U.S. APPLICATIO | N NO. (if known, see 10/520220 | 37 CFR 1.5) | INTERNATIONAL APPLICATION NO. PCT/US2003/021305 | | ATTORNEY'S DOCKET NUMBER BGI-154US2 | | |
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| The foll | owing fees have | e been submitt | ed | | | CALCULATION | S PTO USEONLY |
| 21. Basi | | | | \$ | | | |
| If the written opin prepared by I | PEA/US indicates a | A/US or the interral claims satisfy p | ational preliminary exam | 33(1)-(4) | \$0 | \$ | |
| If the written opin IPEA/US Search fee (37 C Internation International Sea | indicates all claims FR 1.445(a)(2)) ha nal Searching Auth arch Report prepare communicated to | or the internationa satisfy provisions as been paid on thorityed by an ISA other the US by the IB | I preliminary examination of PCT Article 33(1)-(4) e international application than the US and provide | n to the Us | \$0 SPTO as an \$100 Office or \$400 | \$ | |
| | TOTAL OF 21, 22 | 2 and 23 = | _ | | | \$ 0.0 | 00 |
| sequer electro | nce listing in compli nic medium) (37 Cl | iance with 37 CFR FR 1.492(j)). | ed in paper over 100 she 1.821(c) or (e) or computes of paper or fraction the | uter progra | | | |
| Total Sheets | Extra Sheets | | additional 50 or fraction up to a whole number) | | RATE | | |
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| | | | e, examination fee, or the (37 CFR 1.492(h)). | oath or d | eclaration | \$ | |
| CLAIMS | NUN | MBER FILED | NUMBER EXTRA | | RATE | | |
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| | lependent claims - 3 = x | | | | | | |
| MULTIPLE DEP | ENDENT CLAIM(S | (if applicable) | TOTAL OF A | + | | | 10 |
| | | | TOTAL OF A | ABOVE CA | ALCULATIONS = | \$ 0.0 | 10 |
| Applicant | t claims small entity | y status. See 37 C | FR 1.27. Fees above an | re reduced | d by ½. | | |
| | | | | | SUBTOTAL = | \$ 0.0 | 00 |
| | f \$130.00 for furnis ate (37 CFR 1.492 | | anslation later than 30 m | nonths from | n the earliest | \$ | |
| | • | | | TOTAL N | ATIONAL FEE = | \$ | 0.00 |
| | the enclosed assign cover sheet (37 C | | .21(h)). The assignment | t must be a | accompanied + | \$ | |
| | | | то | OTAL FEE | S ENCLOSED = | \$ | 120.00 |
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PTO-1390 (Rev. 07-2005)
Approvement use through 03/31/2007. OMB 0651-0021
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| •—————————————————————————————————————— |
|---|
| a. A check in the amount of \$ to cover the above fees is enclosed. |
| b. x Please charge my Deposit Account No. 12-0080 in the amount of \$ 120.00 to cover the above fees. A duplicate copy of this sheet is enclosed. |
| C. X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-0080 . A duplicate copy of this sheet is enclosed. |
| d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038 |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed an granted to restore the International Application to pending status. |
| $\left(\begin{array}{ccc} & & & & \\ & & & & \\ & & & & \\ & & & & $ |
| SEND ALL CORRESPONDENCE TO: SIGNATURE SIGNATURE |
| Giulio A. DeConti, Jr. LAHIVE & COCKFIELD, LLP |
| 28 State Street Debra J. Milasincic Boston, Massachusetts 02109 NAME |
| (617) 227-7400 |
| October 26, 2005 CUSTOMER NUMBER: 00959 46,931 |
| REGISTRATION NUMBER |
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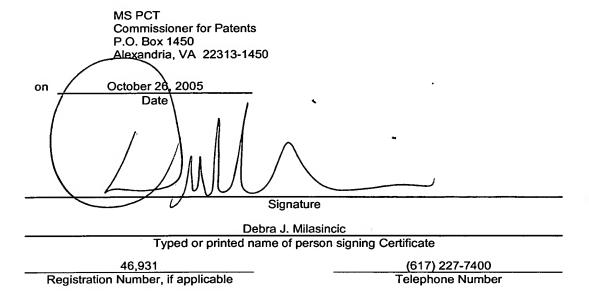
PTO/SB/17 (12-04v2)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). **Application Number** 10/520220-Conf. #2729 January 3, 2005 FEE TRANSMITTAL Filing Date R. Rogers YOCUM First Named Inventor For FY 2005 Examiner Name Not Yet Assigned Applicant claims small entity status. See 37 CFR 1.27 N/A Art Unit **BGI-154US2 TOTAL AMOUNT OF PAYMENT** 120.00 Attorney Docket No. METHOD OF PAYMENT (check all that apply) Check Credit Card Money Order None Other (please identify): X Deposit Account Deposit Account Number: 12-0080 Deposit Account Name: Lahive & Cockfield, LLP For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee Charge any additional fee(s) or underpayment of Credit any overpayments fee(s) under 37 CFR 1.16 and 1.17 **FEE CALCULATION** 1. BASIC FILING, SEARCH, AND EXAMINATION FEES **FILING FEES SEARCH FEES EXAMINATION FEES Small Entity Small Entity Small Entity Application Type** Fee (\$) Fee (\$) Fee (\$) Fees Paid (\$) Fee (\$) Fee (\$) Fee (\$) Utility 300 150 500 250 200 100 200 100 100 50 130 65 Design Plant 200 100 300 150 160 80 Reissue 300 150 500 250 600 300 200 100 O n Provisional O 0 2. EXCESS CLAIM FEES **Small Entity** Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 200 100 Multiple dependent claims 360 180 **Total Claims Multiple Dependent Claims** Extra Claims Fee Paid (\$) Fee Paid (\$) Fee (\$) Extra Claims Fee Paid (\$) Fee (\$) - 3 = 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$) - 100 = (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surdharge): 125/ Extension for response within first month 120.00 SUBMITTED Registration No. (Attorney/Agent) Signature 46,931 Telephone (617) 227-7400 Name (Print/Type) Debra J. Milasincic Date October 26, 2005 I hereby certify that this correspondence is being deposited with the US. Postal Service as Express Mail, Airbill No. EL 914 049 140 US, in an envelope addressed to: MS PCT, Commissioner for flatents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. Dated: October 26, 2005 (Bebra J. Milasincic) Şignature:

Attorney Docket No.: BGI-154US2

Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EL 914 049 140 US in an envelope addressed to:



Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

This Certificate of Express Mailing (1 page)

Transmittal Letter to the United States Designated-Elected Office (3 pages)

Fee Transmittal (1 page; in duplicate)

One Month Request for Extension of Time Under 37 CFR 1.136(a) (1 page; in

duplicate)

Response To Notification Of Missing Requirements Under 35 U.S.C. 371 In The

United States Designated/elected Office (1 page) Oath or declaration of the inventor(s) (4 pages)

Copy of Notification of Missing Requirements (2 pages)

Return Receipt Postcard

Charge \$120.00 to deposit account 12-0080

I hereby certify that this correction tence is being deposited with the U.S. Postal Service as Express Mail, Airban Sc. EL/914 049 140 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.Q. Box 1450 Alexandria, VA 22313-1450, on the date shown below.

Dated: October 26, 2005

(Debra J Milasincic)

Docket No.: BGI-154US2

(PATENT)

IN THE UNIXED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: R. Rogers Yocum et al.

Application No.: 10/520220

Confirmation No.: 2729

Filing Date of

International Application: July 3, 2003

Art Unit: N/A

For: MICROORGANISMS AND PROCESSES FOR

ENHANCED PRODUCTION OF

PANTOTHENATE

Examiner: Not Yet Assigned

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE

MS PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Notification of Missing Requirements Under 35 U.S.C. 371, mailed August 1, 2005, Applicant respectfully submit a Declaration, Petition and Power of Attorney, as well as a copy of the Notification of Missing Requirements.

Please charge our Deposit Account No. 12-0080 in the amount of \$120.00 covering the fees set forth in 37 CFR 1.17(a)(1). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 12-0080 \under Order No. BGI-154US2.

Dated: October 26, 2005

Respectfully submitted

Debra J. Milasincic Registration No.: 46,931

LAHIVE & COCKFIELD, LLP

28 State Street

Boston, Massachusetts 02109

(617) 227-7400

(617) 742-4214 (Fax)

Attorney/Agent For Applicant



United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1459 Alexandris, Viginia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/520,220

R Rogers Yocum

BGI-154US2

INTERNATIONAL APPLICATION NO.

PCT/US03/21305 LA. FILING DATE

PRIORITY DATE

07/03/2003

07/03/2002

00959 LAHIVE & COCKFIELD, LLP. 28 STATE STREET **BOSTON, MA 02109**

ENTERED

CONFIRMATION NO. 2729 371 FORMALITIES LETTER

OC000000016662421*

Date Mailed: 08/01/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 01/03/2005
- Copy of the International Search Report filed on 01/03/2005
- Preliminary Amendments filed on 01/03/2005
- Biochemical Sequence Diskette filed on 01/03/2005
- Biochemical Sequence Listing filed on 01/03/2005
- U.S. Basic National Fees filed on 01/03/2005
- Priority Documents filed on 01/03/2005

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

• Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

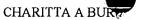
A copy of this notice MUST be returned with the

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(E&COCKFIELD

SET DEPT.



Telephone: (703) 308-9140 EXT 207

PART 1 - ATTORNEY/APPLICANT COPY

| U.S. APPLICATION NUMBER NO. | INTERNATIONAL APPLICATION NO. | ATTY, DOCKET NO. |
|-----------------------------|-------------------------------|------------------|
| 10/520.220 | PCT/US03/21305 | BGI-154US2 |

FORM PCT/DO/EO/905 (371 Formalities Notice)